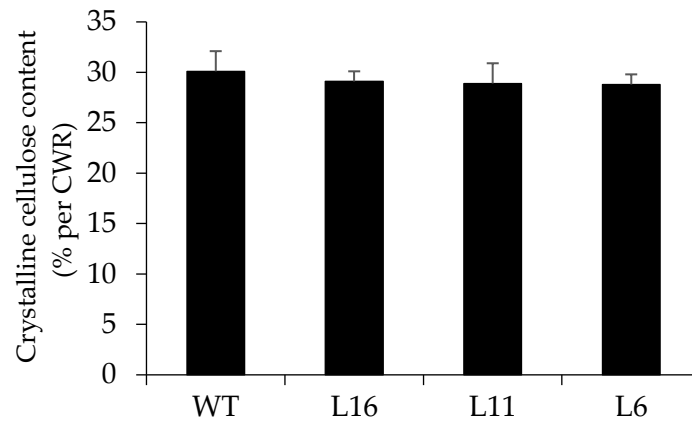


Figure S1. Cell wall components and saccharification efficiency in stems of 3-month-old *ugt72b37* poplar mutants and WT. **A.** Percentage of cell wall residues (CWR), lignin composition (S, G, and H units) and yield of monomers in WT and *ugt72b37* mutants (L6, L11 and L16 lines). *: significant difference (T-Test, $p < 0.05$) compared with the WT. **B.** Crystalline cellulose content (% CWR). **C.** Saccharification efficiency determined by analyzing the glucose content of the CWR after soft acid treatment with HCl 1M. Values are means \pm SE of 5, 5, 2 and 4 biological replicates for WT, L16, L11, and L6, respectively; with 2 technical replicates. A T-Test was performed in B. and C. (except for L11 because of a low number of biological replicates), and no significant difference between the WT and the *ugt72b37* mutants were measured.

A.

	WT	L16	L11	L6
CWR (%)	89.08 \pm 0.60	88.59 \pm 0.40	89.31 \pm 0.20	90.09 \pm 0.60
H ($\mu\text{mol/g}$ CWR)	3.26 \pm 0.33	3.46 \pm 0.16	3.75 \pm 0.24	3.58 \pm 0.05
G ($\mu\text{mol/g}$ CWR)	172.70 \pm 3.77	172.67 \pm 2.85	181.54 \pm 0.97	174.44 \pm 3.56
S ($\mu\text{mol/g}$ CWR)	328.00 \pm 5.94	337.35 \pm 4.90	342.45 \pm 3.24	332.73 \pm 3.41
H + G + S ($\mu\text{mol/g}$ CWR)	503.96 \pm 9.81	513.49 \pm 9.80	527.74 \pm 3.55	510.75 \pm 7.88
CASA lignin content (%)	21.31 \pm 0.34	23.75 \pm 0.65 *	24.10 \pm 0.80	23.37 \pm 0.53 *
H ($\mu\text{mol/g}$ lignin)	15.28 \pm 1.53	14.82 \pm 0.61 *	15.55 \pm 1.43	15.06 \pm 0.22 *
G ($\mu\text{mol/g}$ lignin)	810.43 \pm 17.70	738.87 \pm 10.92 *	753.29 \pm 5.68	734.50 \pm 17.29 *
S ($\mu\text{mol/g}$ lignin)	1539.18 \pm 27.89	1443.52 \pm 18.76 *	1420.94 \pm 19.00	1400.98 \pm 16.59 *
H + G + S ($\mu\text{mol/g}$ lignin)	2364.89 \pm 46.03	2197.21 \pm 29.74 *	2189.78 \pm 14.75	2150.54 \pm 33.17 *
S/G ratio	1.89 \pm 0.02	1.95 \pm 0.01	1.89 \pm 0.04	1.91 \pm 0.03

B.



C.

